

Date: Friday, 9/15/2006 12:00:09 PM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : SHAFT SLEEVE  
 Job Number : 28618  
 Estimate Number : 11155  
 P.O. Number : N/A Part Number : D32337  
 This Issue : 9/15/2006 S.O. No. : N/A Drawing Number : D3233 REV B  
 Prsht Rev. : NC Project Number : N/A  
 First Issue : N/A Type : MACHINED PARTS Drawing Revision : B  
 Previous Run : N/A Material : N/A  
 Due Date : 9/30/2006 Qty: 20 Um: Each  
 Written By : JA 06 09 15  
 Checked & Approved By : JA 06 09 15  
 Comment : Est. A 05.03.14 New issue KJ/JLM

## Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description :

1.0

M1020TR1375W125

COLD DRAWN ROUND TUBE



Comment: Qty.: 0.1860 f(s)/Unit Total : 3.7191 f(s)

1020-1025 Round Tube

Material: AISI 1020-1025 Seamless Round Tubing Cold Drawn per MIL-T-5066 or ASTM A513-00 MT1020

SRA or AMS 5075 or AMS 5077

(M1020TR1.375W.125)

Identify for D3233-7

Batch: M17015

06/09/18

2.0

LATHE CONV.

CONVENTIONAL LATHE



Comment: CONV.LATHE

Turn as per Dwg D3233

06/09/18

20

3.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

06/09/18

20

4.0

QC8

SECOND CHECK



Comment: SECOND CHECK

J.G

06/09/19

20

5.0

MILLING CONV.

CONVENTIONAL MILLING MACHINE



Comment: CONVENTIONAL MILLING MACHINE

Deburr

06.09.18

N/A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☐ No ☒ DQA: ☒ Date: 06/09/20  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 9/15/2006 12:00:09 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SHAFT SLEEVE

Job Number: 28618

Part Number: D32337

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

BC

06-09-19

20

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

57417

06/9/19

20

8.0

QC21

FINAL INSPECTION/W/O RELEASE



20

Comment: FINAL INSPECTION/W/O RELEASE

20

06/09/20

Job Completion



U 06-09-20

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

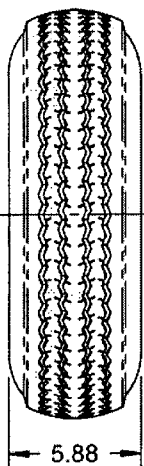
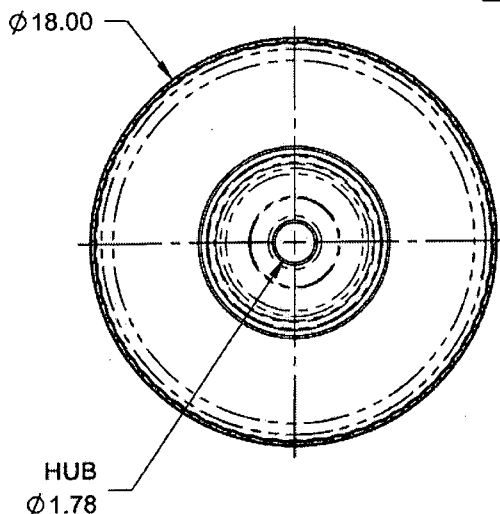
QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



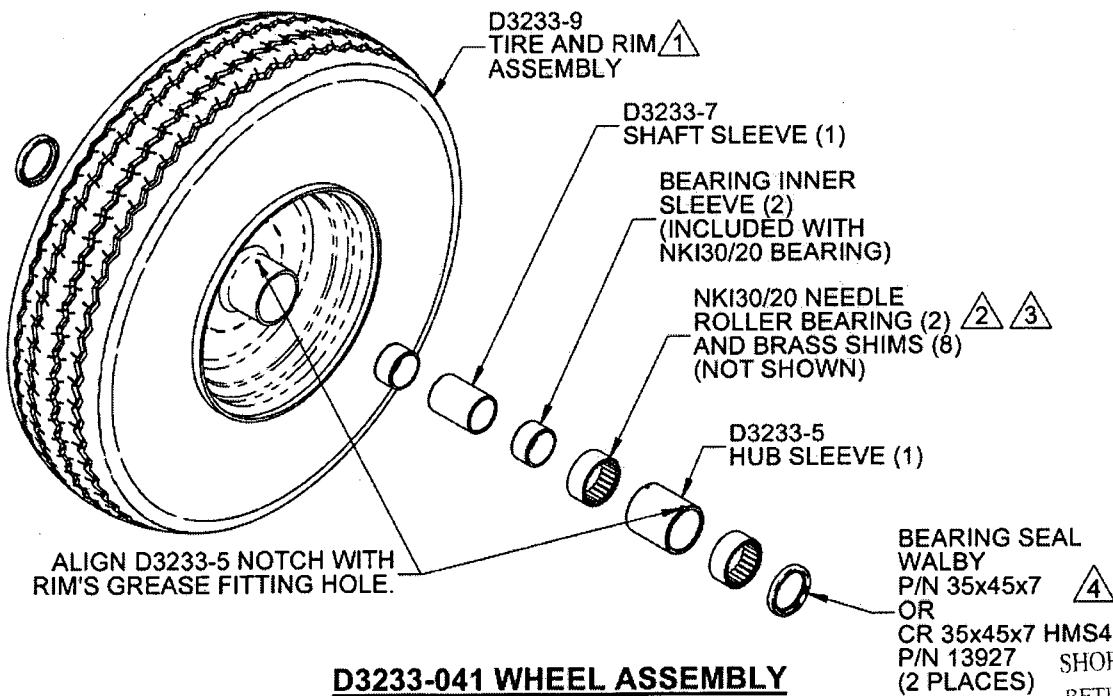
DESIGN	DRAWN BY	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. <b>D3233</b>	REV. B SHEET 1 OF 3
DATE	05.03.08	TITLE <b>WHEEL ASSEMBLY</b>	SCALE 1:1
A	05.02.18	NEW ISSUE	
B	05.03.08	ADDED BEARING SEALS	



**RELEASED**  
05/05/04

WHEEL SPECIFICATIONS		
SIZE	MAXIMUM LOAD	MAXIMUM INFLATION LOAD
TIRE: 19.0 x 5.8 RIM: 5.70 x 8.0	910 LBS (RANGE C)	90 PSI*

\* MANUFACTURER'S RECOMENDATIONS ARE 75 PSI FOR HIGH SPEED USE.



### D3233-041 WHEEL ASSEMBLY

#### NOTES:

- 1) POSSIBLE SUPPLIER: McMASTER-CARR, P/N 8353T74
- 2) POSSIBLE SUPPLIER: GENERAL BEARING
- 3) PRESS FIT NEEDLE ROLLER BEARINGS INTO RIM HUB WITH (4) 0.5 X 0.75 X 0.004 BRASS SHIMS PER BEARING, (1) AT EACH QUADRANT.
- 4) POSSIBLE SUPPLIER: GENERAL BEARING
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

BEARING SEAL  
WALBY  
P/N 35x45x7  
OR  
CR 35x45x7 HMS4 R  
P/N 13927  
(2 PLACES)

SHOP COPY  
RETURN TO  
ENGINEERING

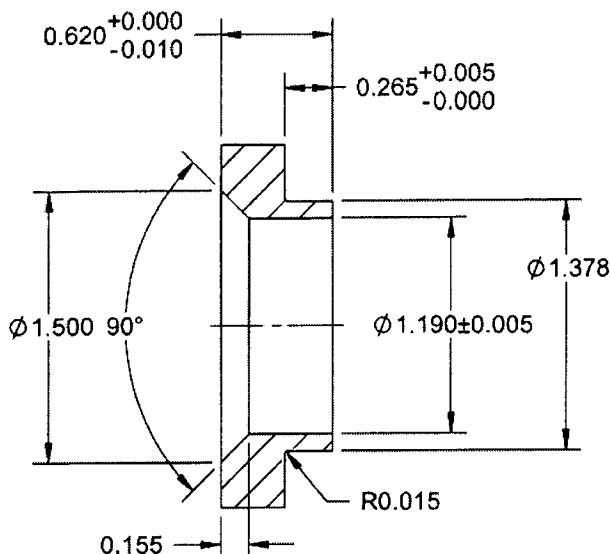
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. **28618**

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

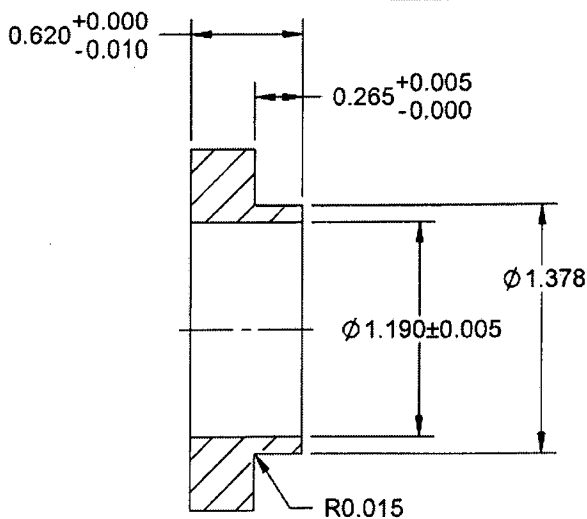
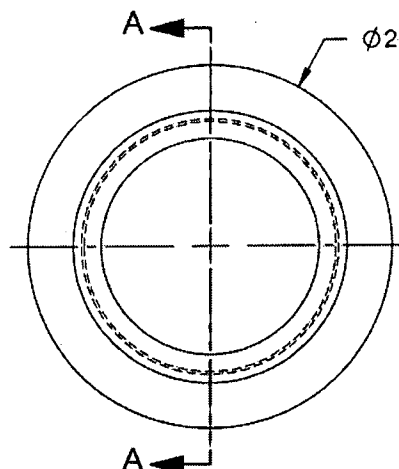


DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3233	REV. B SHEET 2 OF 3
DATE 05.03.08		TITLE WHEEL ASSEMBLY	SCALE 1:1



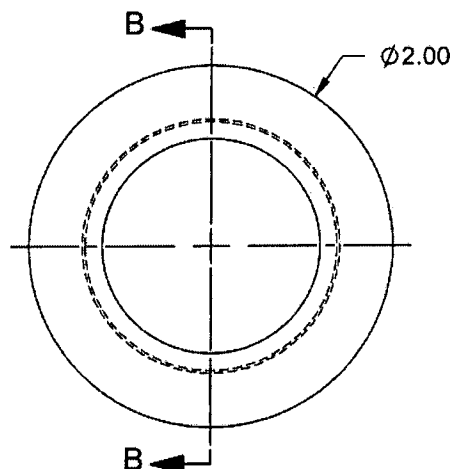
**SECTION A-A**

**D3233-1 INSIDE WASHER**



**SECTION B-B**

**D3233-3 OUTSIDE WASHER**



**NOTES:**

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00 MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS (REF. DART SPEC. M1020TR)
- 2) FINISH: POWDER COAT FIRE RED (REF. 4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

SHOP COPY  
RETURN TO  
ENGINEERING

CONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE

WORK ORDER  
NO. 28618

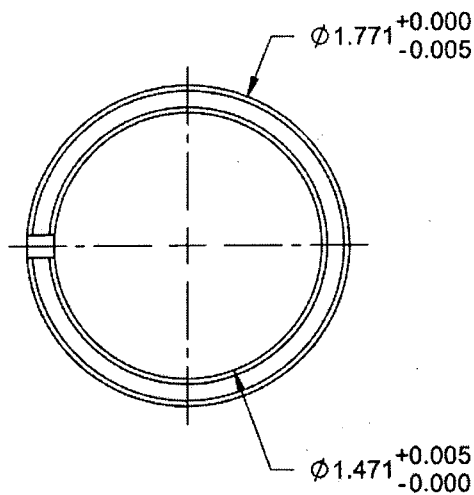
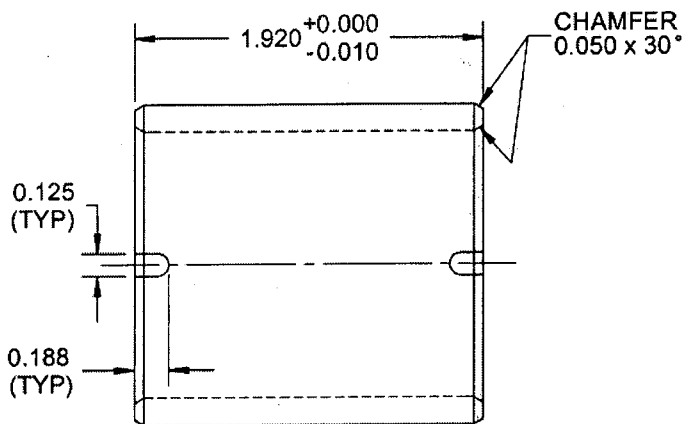
COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

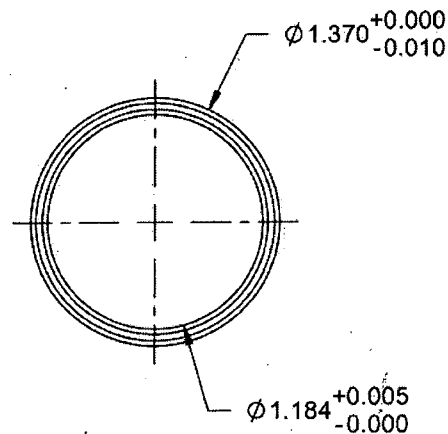
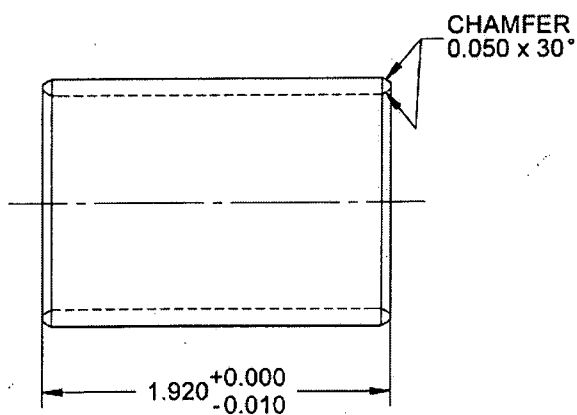


DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3233	REV. B SHEET 3 OF 3
DATE 05.03.08	TITLE WHEEL ASSEMBLY		SCALE 1:1

RELEASED  
*[Signature]*  
05/05/04



**D3233-5 HUB SLEEVE**



**D3233-7 SHAFT SLEEVE**

**NOTES:**

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00, MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS (REF. DART SPEC. M1020TR)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.030

SHOP COPY  
RETURN TO  
ENGINEERING  
CONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. **28618**

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

